PAPER – 19: COST AND MANAGEMENT AUDIT

The following table lists the learning objectives and the verbs that appear in the syllabus learning aims and examination questions:

	Learning objectives	Verbs used	Definition
LEVEL C	KNOWLEDGE What you are expected to know	List	Make a list of
		State	Express, fully or clearly, the details/facts
		Define	Give the exact meaning of
	COMPREHENSION What you are expected to understand	Describe	Communicate the key features of
		Distinguish	Highlight the differences between
		Explain	Make clear or intelligible/ state the meaning or purpose of
		Identity	Recognize, establish or select after consideration
		Illustrate	Use an example to describe or explain something
	APPLICATION How you are expected to apply your knowledge	Apply	Put to practical use
		Calculate	Ascertain or reckon mathematically
		Demonstrate	Prove with certainty or exhibit by practical means
		Prepare	Make or get ready for use
		Reconcile	Make or prove consistent/ compatible
		Solve	Find an answer to
		Tabulate	Arrange in a table
	ANALYSIS How you are expected to analyse the detail of what you have learned	Analyse	Examine in detail the structure of
		Categorise	Place into a defined class or division
		Compare and contrast	Show the similarities and/or differences between
		Construct	Build up or compile
		Prioritise	Place in order of priority or sequence for action
		Produce	Create or bring into existence
	SYNTHESIS How you are expected to utilize the information gathered to reach an optimum conclusion by a process of reasoning	Discuss	Examine in detail by argument
		Interpret	Translate into intelligible or familiar terms
		Decide	To solve or conclude
	EVALUATION How you are expected to use your learning to evaluate, make decisions or recommendations	Advise	Counsel, inform or notify
		Evaluate	Appraise or asses the value of
		Recommend	Propose a course of action

Paper 19 - COST AND MANAGEMENT AUDIT

Time allowed-3hrs **Full Marks: 100**

Working Notes should form part of the answer.

—Wherever necessary, suitable assumptions should be made and indicated in answer by the candidates.

1. **Answer any four Question [15×4=60]**

(a) (i) A company is engaged in construction of residential housing, offices, industrial units, Roads, Bridges, Marine facilities etc. having sites in India and abroad. The company also has Joint venture projects in India and abroad. Whether Companies (Cost Records and Audit) Rules 2014 would be applicable to the company? [5]

Answer:

All companies engaged in construction business either as contractors or as sub-contractors, who meet with the threshold limits laid down in the Companies (Cost Records and Audit) Rules, 2014 and undertake jobs with the use of own materials [whether self-manufactured/produced or procured from outside] shall be required to maintain cost records and get cost audit conducted as per the provisions of the Companies (Cost Records and Audit) Rules, 2014.

The provisions of the Companies (Cost Records and Audit) Rules, 2014 would also apply for construction activities undertaken under BOT/BOOT mode, or the projects undertaken as EPC contractor or the projects undertaken abroad by a company incorporated in India.

The Companies (Cost Records and Audit) Rules, 2014, do not make any distinction between the Contractor and Sub-Contractor and accordingly all such companies will be included within the ambit of the Rules.

(ii) A company has units in SEZ and in non-SEZ areas. The Companies (Cost Records and Audit) Rules 2014 has exempted companies operating in special economic zones from cost audit. What would be applicability of the Companies (Cost Records and Audit) Rules 2014 on such a company in respect of maintenance of cost accounting records and cost audit? [5]

Answer:

Rule 3 of the Companies (Cost Records and Audit) Rules 2014 is specific and it has mandated maintenance of cost accounting records on all products/activities listed under Table-A and Table-B subject to threshold limits. No exemption is available to any company from maintenance of cost accounting records once it meets the threshold limits. Hence, the above company would be required to maintain cost accounting records for all its units including the one located in the special economic zone.

In view of the provisions of Rule 4(3)(ii) of the Companies (Cost Records and Audit) Rules 2014 the unit located in the special economic zone would be outside the purview of cost audit and the company would not be required to include particulars of such unit in its cost audit report. The other units of the company located outside the special economic zone would be covered under cost audit subject to the prescribed threshold limits.

(iii) In the abridged cost statement, what are Industry specific operating expenses? When should this be used? [3]

Answer:

Industry Specific operating expenses are those which are peculiar to a particular industry such as Telecommunication Industry which shows expenses such as Network Operating cost, License fee, Radio Spectrum charges, Microwave charges etc. which are peculiar to this Industry and should be disclosed separately in the cost statement. The Industry Specific operating expenses will vary from industry to industry depending upon the nature of operations. The industry specific operating expenses shall have to be identified and reported upon in the abridged cost statement.

(iv) Whether each and every transaction with Related Parties is to be disclosed under Para D-5 of Annexure to the Cost Audit Report? [2]

Answer:

Details of related Party Transaction are required to be provided in respect of each Related Party and each Product/Service for the year as a whole and not transaction-wise.

(b)(i) What is the procedure to be followed for fixing the remuneration of a cost auditor? [5]

Answer:

Rule 14 of the Companies (Audit and Auditors) Rules, 2014 has laid down the procedure of appointment and fixing the remuneration of a cost auditor. It states as follows:

Remuneration of the Cost Auditor: For the purpose of sub-section (3) of section 148,—

(a) in the case of companies which are required to constitute an audit committee—

  (i) the Board shall appoint an individual, who is a cost accountant in practice, or a firm of cost accountants in practice, as cost auditor on the recommendations of the Audit committee, which shall also recommend remuneration for such cost auditor;

  (ii) the remuneration recommended by the Audit Committee under (i) shall be considered and approved by the Board of Directors and ratified subsequently by the shareholders;

(b) in the case of other companies which are not required to constitute an audit committee, the Board shall appoint an individual who is a cost accountant in practice or a firm of cost accountants in practice as cost auditor and the remuneration of such cost auditor shall be ratified by shareholders subsequently.

(ii) Is there any obligation on the part of cost auditor to report offence of fraud being or has been committed in the Company by its officers or employees? [3]

Answer:

Sub-rule (7) of Rule 6 of the Companies (Cost Records and Audit) Rules 2014 states that "the provisions of sub-section (12) of section 143 of the Act and the relevant rules made thereunder shall apply mutatis mutandis to a cost auditor during performance of his functions under section 148 of the Act and these rules".

As per sub-section (12) of section 143 of the Companies Act 2013, extract of which is given above, it is obligatory on the part of cost auditor to report offence of fraud which is being or has been committed in the company by its officers or employees, to the Central Government as per the prescribed procedure under the Rules.

As per the proviso to above sub-section, it has been stated that in case of a fraud involving lesser than the specified amount, the auditor shall report the matter to the audit committee constituted under section 177 or to the Board in other cases within such time and in such manner as may be prescribed.

(iii) The particulars relating to the import of Sealing Ring made by AB & Co. during December, 2014 are given below:

(a) Sealing Ring - 1,000 pieces invoiced £ 2.00 C.I.F. Mumbai Port.

(b) Customs duty was paid @ 100% on invoice Value (which has converted to Indian currency by adopting an exchange rate of ₹ 17.20 per £)

(c) Clearing charges - ₹1,800 for the entire consignment, and'

(d) Freight charges - ₹1,400 for transporting the consignment from Mumbai Port to factory premises.

It was found on inspection that 100 pieces of the above material were broken and, therefore, rejected.

There is no scrap value for the rejected part. No refund for the broken material would be admissible as per the terms of contract. The management decided to treat 60 pieces as normal loss and the rest 40 pieces as abnormal loss. The entire quantity of 900 pieces was issued to production.

Calculate

I. Total cost of material, and

II. Unit cost of material issued to production.

Also state briefly how the value of 100 pieces rejected in inspection will be treated in costs. [4]

Solution:

AB & Co.

I.	**Computation of total cost of materials**	
	Sealing rings (1000 × 2 × 17.20)	₹34,400
	Customs duty 100% of Invoice value	34,400
	Clearing charges at port	1,800
	Freight charges -- Port to factory	1,400
	Total Cost of materials	72,000
II.	**Unit cost of material**	**Nos.**
	Total quantity received	1,000
	Less : Normal loss	60
		940
	Less: Abnormal loss	40
	Total pieces issued to production	900
	Total cost of materials	₹72,000

This is to be spread over 940 units.

Unit cost of material issued to production (₹ 72,000 ÷ 940) ₹ 76.5957

Note. The cost of normal loss is to be borne by production during the period and abnormal loss is treated like good units produced for the purpose of valuation.

Cost to be charged to production (900 units × ₹ 76.5957)	₹68,936
Cost to be charged off to P & L A/c (40 units × ₹ 76.5957)	3,064
	72,000

(iv) State the reasons of over-absorption and under-absorption of overheads and list the methods of their absorption. [3]

Answer :

Reason for over/under absorption of overheads: Over/under-absorption of overheads arises due to one or more of the following reasons.

1) Improper estimation of overhead.
2) Error in estimating the level of production.
3) Unanticipated changes in the methods or techniques of production.
4) Under-utilisation of the available capacity.
5) Seasonal fluctuations in the overhead expenses from period to period.

Methods for absorbing under/over absorbed overheads: The over-absorption and under-absorption of overheads can be disposed off in cost accounting by using any one of the following methods:

1) Use of supplementary rates
2) Writing off to costing profit & loss Account
3) Carrying over to the next year's account

(c)(i) The Companies (Cost Records and Audit) Rules, 2014 requires submission of a single cost audit report at company level. What is the procedure of certifying and submission of cost audit report of a company where more than one cost auditor is appointed? [5]

Answer:

In case of a company having more than one cost auditor, it would be necessary for the company to appoint/designate one cost auditor as the lead cost auditor for consolidation of the report.

The individual cost auditors appointed for specific units/products would be required to audit and provide Para numbers A-4, B-1, B-2, B-2A, B-2B, B-2C, C-1, C-2, C-2A, C-2B, C-2C (as applicable), D-1 in respect of the products/services coming under the purview of their respective audits. The individual auditors would also be required to submit to the Board of Directors the individual cost audit report as per Form of the Cost Audit Report given in CRA-3.

The lead auditor would be responsible for preparing the Para numbers A-3, D-2, D-3, D-4, D-5, D-6 and consolidate Para numbers A-4, B-1, B-2, B-2A, B-2B, B-2C, C-1, C-2, C-2A, C-2B, C-2C (as applicable), D-1 received from the individual cost auditors.

The consolidated report should contain the reports of all the individual cost auditors including the report of the Lead Cost Auditor. In case individual cost auditors have any observations or suggestions or qualifications, they would be required to mention the same under Para 2 of

the cost audit report and the lead auditor would have to mention the specific observations and/or qualifications of all the individual cost auditors in the place provided for the same in the under Para A-1.
The consolidated report so prepared would be converted to XBRL and submitted to the Central Government by the Company in Form CRA-4.

(ii) What is installed capacity and how is this different from total available capacity? How the installed capacity is to be calculated in a multi-product company using the same machine/ facilities? Should installed capacity be the capacity at the beginning of the year or at the end of the year under audit? [5]

Answer:
The Institute of Cost Accountants of India has defined "Installed Capacity is the maximum productive capacity, according to the manufacturer's specifications or determined through an expert study" [CAS-2 of Cost Accounting Standards]. The Installed Capacity to be disclosed in the Quantitative Details of CRA-3 is to be considered as at the beginning of the year. Capacity enhanced during the year should be considered as the increase in Installed Capacity during the year on pro-rata basis. Available capacity is the total installed capacity after adjustment of capacity enhanced during the year and if any capacity is available by means of leasing arrangement or taking on third-party capacity for increasing the total capacity.
If the same available capacity is utilised for production of multiple products, the following different basis may be adopted to determine the available capacity in respect of each of the products:
(i) If the company has a system of allocating the total available capacity for production of multiple products, then such allocated available capacity is to be considered for the products being manufactured by utilising the same production facility.
(ii) If the production allocation is not pre-determined and changes from period to period, then the capacity utilisation is to be determined on the basis of total production of all the products taken together and the total available capacity should be considered for all the products.

(iii) Is CRA-3 applicable for companies whose financial year commenced prior to April 1, 2014? Which Rules are applicable to companies whose financial year commenced on January 1, 2014? [3]

Answer:
The Section 148 of the Companies Act, 2013 and Companies (Cost Records and Audit) Rules, 2014 are applicable from April 1, 2014. Companies that were covered under the erstwhile Companies (Cost Accounting Records) Rules, 2011 and met the threshold limits prescribed therein are required to get the cost audit of their companies audited for the financial year 01/01/2014 to 31/12/2014 under the 2011 Rules and submit their respective reports under Companies (Cost Audit Report) Rules, 2011.
Companies (Cost Records and Audit) Rules, 2014 is applicable to companies maintaining calendar financial year from 01/01/2015 onwards subject to the products/services being covered under Table-A or Table-B of Rule 3 and meeting the prescribed threshold limits.

(iv) The Companies (Cost Records and Audit) Rules, 2014 covers "Generation, transmission, distribution and supply of electricity" with no corresponding CETA Heading. Whether the Quantitative Information and Abridged Cost Statement in respect of Electricity are required to be reported under the Service Sector in the absence of a CETA Heading? [2]

Answer:

The reporting of electricity generation activity will be considered under "Manufacturing" and should be shown under CETA Heading 2716. Transmission and Distribution activities should be reported under the "Service Sector".

(d)(i) What are the principles of measuring 'overheads' as per CAS 3? [5]

Answer:

Principles of measuring 'overheads' are as follows:

(i) Overheads representing procurement of resources shall be determined at invoice or agreed price including duties and taxes, and other expenditure directly attributable thereto net of discounts (other than cash discounts), taxes and duties refundable or to be credited.

(ii) Overheads other than those referred to in (i) shall be determined on the basis of cost incurred in connection therewith.
For example, machinery spare fabricated internally or a repair job carried out internally will include cost incurred on material, employees and expenses.

(iii) Any abnormal cost where it is material and quantifiable shall not form part of the overheads.

(iv) Finance costs incurred in connection with procured or self generated resources shall not form part of overheads.

(v) Overheads shall not include imputed cost.

(vi) Overhead variances attributable to normal reasons shall be treated as part of overheads. Overhead variances attributable to abnormal reasons shall be excluded from overheads.

(vii) Any subsidy / Grant / Incentive or amount of similar nature received / receivable with respect to overheads shall be reduced for ascertainment of the cost of the cost object to which such amounts are related.

(viii) Fines, penalties, damages and similar levies paid to statutory authorities or other third parties shall not form part of the overheads.

ix) Credits / recoveries relating to the overheads, material and quantifiable, shall be deducted from the total overhead to arrive at the net overheads. Where the recovery exceeds the total overheads, the balance recovery shall be treated as other income.

(x) Any change in the cost accounting principles applied for the measurement of the overheads shall be made only if, it is required by law or for compliance with the requirements of a cost accounting standard, or a change would result in a more appropriate preparation or presentation of cost statements of an entity.

(ii) How would you assign administrative overheads as per CAS 11? [3]

Answer:

Assignment of administrative overheads to the cost objects shall be based on either of the following two principles:

(i) Cause and Effect – Cause is the process or operation or activity and effect is the incurrence of cost.
(ii) Benefits received– Overheads are to be apportioned to various cost objects in proportion to the benefits received by them.

The costs of shared services should be assigned to user activities on the basis of actual usage. General management costs should be assigned on rational basis.

(iii) How are 'inward' and 'outward' transportation cost treated as per CAS 5? [3]

Answer:

Inward transportation costs shall form the part of the cost of procurement of materials which are to be identified for proper allocation/ apportionment to the materials / products.
Outward transportation cost shall form the part of the cost of sale and shall be allocated / apportioned to the materials and goods on a suitable basis.

Explanation:

Outward transportation cost of a product from factory to depot or any location of sale shall be included in the cost of sale of the goods available for sale.

(iv) How would you determine the cost of material consumed in production for captive consumption as per CAS 4? [4]

Answer:

Material Consumed shall include materials directly identified for production of goods such as:
(i) indigenous materials
(ii) imported materials
(iii) bought out items
(iv) self manufactured items
(v) process materials and other items

Cost of material consumed shall consist of cost of material, duties and taxes, freight inwards, insurance, and other expenditure directly attributable to procurement. Trade discount, rebates and other similar items will be deducted for determining the cost of materials. Cenvat credit, credit for countervailing customs duty, Sales Tax set off, VAT, duty draw back and other similar duties subsequently recovered/ recoverable by the enterprise shall also be deducted.

(e)(i) What are the factors need to be considered by the auditor of the company while formulating the audit strategy? [7]

Answer:

In formulating the Overall audit strategy, the Cost Auditor shall consider all relevant factors.

These relevant factors include:
(a) results of preliminary activities;
(b) knowledge from previous audits and other engagements with the auditee;
(c) knowledge of business;
(d) nature and scope of the audit;
(e) statutory deadlines and reporting format;
(f) relevant factors determining the direction of the audit efforts;
(g) nature, timing and extent of resources required for the audit.

In addition to above, the auditor should also consider the following factors:

(a) The cost reporting framework generally prescribed, under the Companies Act and Rules prescribed there under, as well as under any other law as applicable, on the basis of which the cost information to be audited has been prepared, including need for reconciliation with financial reporting framework.

(b) Industry regulators' requirement as to how costs will be handled.

(c) Unique features of an industry that influence audit requirements such as definition of product in the newspaper industry.

(d) Reliance that can be placed on the work of financial auditors, other cost auditors appointed by the entity and internal auditors such as their attendance in annual stocktaking

(e) State of IT (Information Technology) implementation, whether the entity is using an ERP (Enterprise Resource Planning) system or internally developed systems and the reliance that can be placed on them.

(f) Statutory timelines for cost reporting, which can be modified by the management for early completion.

(g) Timelines for Board/ audit committee meetings, which can set the time limits for completion of audit work.

(h) Resources required and available in terms of manpower, equipment and others and the assignment of these to specific parts of the work.

(ii) State the factors on which content and form of audit documentation will depend? [3]

Answer:

The content and form of audit documentation will depend on a number of factors such as:

(a) the size and complexity of the operations of the auditee,

(b) the extent of computerization of cost records,

(c) the assessed risks of material misstatement of cost,

(d) the cost audit methodology and tools used. For example whether automated queries were used to get audit evidence from cost records.

(e) the nature of the audit procedure to be performed.

(iii) As a cost auditor of the company, what are the areas required to be check with regards to IT environment and controls? [5]

Answer:

The cost auditor should assess the following with regard to IT environment and controls.

(a) Reliance on systems or programs that are inaccurately processing data, processing inaccurate data, or both.

(b) Unauthorized access to data that may result in destruction of data or improper changes to data, including the recording of unauthorized or non-existent transactions, or inaccurate recording of transactions. Particular risks may arise where multiple users access a common database.

(c) The possibility of IT personnel gaining access to privileges beyond those necessary to perform their assigned duties thereby breaking down segregation of duties.

(d) Unauthorized changes to data in master files.

(e) Unauthorized changes to systems or programs.

(f) Failure to make necessary changes to systems or programs.
(g) Inappropriate manual interventions.
(h) Potential loss of data or inability to access data as required.

(2) Answer any two questions [10×2=20]

(a) As an operational auditor of the company, how would you evaluate the performance of a company? [10]

Answer:
Performance evaluation is based primarily on - (1) Productivity, (2) Personnel, (3) Workload, (4) Cost, and (5) Quality. All the above bases are amenable for quantitative expression and analysis. A comparative analysis of the above bases is given below –

(i) Productivity

(A) Quantitative Aspects

The Auditor should look into aspects like -
1. Input-Output Ratios for materials,
2. Production Loss and rejections,
3. Quantitative Ratios in services, e.g. man-hours per customer or man-hours per application processed.

(B) Analytical Aspects

In case of unsatisfactory production performance, the Auditor looks to reasons, e.g. -
1. Poor quality of materials,
2. Non-availability of skilled personnel,
3. Improper machine maintenance,
4. Deficient ancillary services like power supply, etc.
5. Excessive wastages / scrap.

(C) Improvement Aspects

The operational auditor analyses whether methods of work can be improved and better productivity than planned can be achieved.

(ii) Personnel

(A) Quantitative Aspects

The Auditor analyses -
1. Number of Employees,
2. Employee Turnover,
3. Total, regular and overtime hours worked,
4. Ratio of Direct Employees to Indirect Employees.

(B) Analytical Aspects

In case of unsatisfactory results, the Auditor looks to reasons, e.g. -
1. Non-availability of skilled personnel,
2. Over-staffing or under-staffing,
3. Lack of training,
4. Management attitude towards workers and trade unions,
5. Poor working conditions,
6. Lack of Team spirit, etc.

(C) Improvement Aspects

The Operational Auditor also analyses whether improvements can be brought about in aspects affecting personnel e.g. -

1. Revamping personnel policy,
2. Providing fair wages to workers,
3. Mental revolution in Management, etc.

(iii) Workload measurement

(A) Quantitative Aspects

The Auditor analyses -

1. Volume or quantity or work handled and/or performed,
2. Volume of new work,
3. Backlog of work, etc.

(B) Analytical Aspects

The Operational Auditor would analyse factors like -

1. Change in volume of work,
2. Extent of backlog of work,
3. Unrealistic Time Standards set for performance, and
4. Ability of the entity in meeting production deadlines or target dates.

(C) Improvement Aspects

Improvement aspects would involve -

1. Need for working overtime or fresh recruitment, etc.
2. Setting realistic time standards for work, etc.

(iv) Quality of Work

(A) Quantitative Aspects

The Auditor analyses -

1. Number of customers' complaints,
2. Rejections by Quality Control Department,
3. Number of Workers' grievances,
4. Number of errors in invoicing or recording transactions,
5. Quantity of scrap and wastages.

(B) Analytical Aspects

The Operational Auditor analyses factors like -

1. Extent of satisfaction of Customers, Suppliers, Bankers, Workers, etc.
2. Adherence to quality standards set by the entity
3. Reasons for deviations from quality standards e.g. defective materials, untrained workers, unsatisfactory work environment, etc.

(C) Improvement Aspects

The operational Auditor enquires improvement aspects like -

1. Change in work methods,
2. Boosting the workers' morale by adding more technical facilities,
3. Better supervision, and
4. Enforcing stricter control on raw material quality.

(v) Cost

(A) Quantitative Aspects

Basically Cost Aspects are quantitative in nature.

(B) Analytical Aspects

The following aspects should be analysed -

1. Realistic Classification,
2. Proper accounting of Costs,
3. Analysis of Value-Added and Non-Value Added Costs.

(C) Improvement Aspects

Areas of Cost Reduction and Cost Control are analysed, e.g. elimination of non-value added activities, reduction of wastages, developing cost-consciousness etc.

(b) As an auditor of a company, how would you verify the Inventory of the company? [10]

Answer:

Audit of Inventories

1. **Evaluation of Internal Controls:** The Auditor should evaluate the following aspects -
   (a) Segregation of functions whose combination permits the commitment/ concealment of fraud/error.
   (b) Use of pre-numbered standardized forms in Stores Procedures.
   (c) System of cross-checking the data generated by different operating departments.
   (d) Specific controls over Receipts, Issues, Physical Inventories, and Inventory Records.
2. **Assertions:** In an audit of Inventories, the Auditor should confirm the Management's assertions regarding the following-
   (a) **Existence:** That all recorded inventories exist as at the year-end.
   (b) **Ownership:** That all inventories owned by the entity are recorded and that all recorded inventories are owned by the entity.
   (c) **Valuation:** That the stated basis of valuation of inventories is appropriate and properly applied, and that the condition of inventories is recognised in their valuation.
3. **Verification:** Verification of Inventories may be carried out by employing the following procedures-
   (a) Examination of Records,
   (b) Attendance at Stock-Taking,
   (c) Obtaining confirmations from Third Parties,
   (d) Examination of Valuation and Disclosure, and
   (e) Analytical Review Procedures.
4. **Examination of Records:**
   (a) The Auditor should verify whether detailed stock records are maintained in the form of Stores / Stock Ledgers showing in respect of each major item, the receipts, issues and balances.
   (b) If the entity does not maintain detailed stock records (except basic records relating to purchases and sales), the Auditor should suitably extend the extent of application of the audit procedures.
5. **Attendance of Stocktaking:** Physical Verification of inventories is the responsibility of the management of the entity. The Auditor's duties in this regard involve the following-

Aspect	Auditors' Duties
Review of Instructions	• Examine the adequacy of procedures of physical verification. • Review instructions relating to physical verification to assess their efficiency. • Review the procedures adopted by the entity to account for the movement of inventories from one location to another within the entity during the stock-taking (e.g. Issues from Stores to Production Department).
Attendance at Stock Taking	• Attend the Stock-Taking where inventories are material and reliance is to be placed on the physical verification by the management. • Observe the physical verification procedure to ensure that the instructions issued in this behalf are being actually followed. • Perform test-counts to confirm the effectiveness of stock-taking, giving importance to stocks which have a high value either individually or as a category of stocks. • Examine the physical condition of inventories.
Cut-off Procedures	See if the entity has instituted appropriate cut-off procedures to ensure- • Goods purchased but not received have been included in the inventories and the liability has been provided for; • Goods sold but not dispatched have been excluded from the inventories and credit has been taken for the sales.
Continuous Stock Records	See whether the Management- • Maintains adequate stock records that are kept up-to-date, • Has satisfactory procedures for physical verification of inventories so that the normal circumstances the programme of physical verification will cover all material items of inventories atleast once during the year, and • Investigates and corrects all material differences between the book records and physical counts.
Other Tests	• Review the work sheets and follow-up relating to physical verification. • Review the original physical verification sheets and trace selected items including the more valuable ones into the final inventories. • Compare the final inventories with stock records and other corroborative evidence, e.g. Stock Statements submitted to Banks. • Examine whether the discrepancies noticed on physical verification have been investigated and properly accounted for. • See whether the procedures for identifying defective, damaged, obsolete, excess and slow moving items of inventory are well designed and operate properly.

6. Obtaining Confirmations from Third Parties:

(a) If significant inventories belonging to the entity are held by other parties, the Auditor should verify whether the third parties are not such with whom it is not proper that the inventories of the entity should be held. The Auditor should obtain confirmations from the third parties with whom inventories of the entity have been kept.

(b) Where stocks belonging to third parties are held by the enterprise, the Auditor should seek confirmation from the parties about the stocks held by the enterprise on their behalf.

7. **Examining of Valuation and Disclosure:**

   (a) The Auditor should verify whether inventories are - (i) **valued** properly and consistently in accordance with the recognized accounting principles, and (ii) **disclosed** properly in the Financial Statements, as per AS and Statutory Requirements, if any.

   (b) The Auditor should examine the methods of applying the basis of inventory valuation, e.g. determination of cost, treatment of overheads, etc.

   (c) If Standard Costs are used or where Overheads are charged at standard rates, the Auditor should examine whether appropriate adjustments to inventories have been made in respect of significant variances between Standard Costs and Actual Costs.

   (d) The Auditor should consider, while examining the evidence in support of the assessment of Net Realizable Value, whether appropriate allowance has been made in determining the Net Realizable Value of defective, damaged, obsolete, excessive and slow-moving inventories.

8. **Analytical Procedures:** The following analytical procedures may be relevant -

   (a) Quantitative reconciliation of inventories i.e. Opening Stocks, Purchases, Production, Sales and Closing Stocks.

   (b) Comparison of current year quantities and values of major items of inventories with those of the previous year.

   (c) Comparison of current year ratios of various items (i.e. Raw Materials, WIP and Finished Goods) of inventories to total inventories with the corresponding figures for the previous year.

   (d) Comparison of ratios of quantities and values of current year's inventories to the quantities and values of current year's sales and purchases with the corresponding figures for the previous year.

   (e) Comparison of current year's G.P. ratio with the corresponding figure for the previous year

   (f) Comparison of yield with the corresponding figure for the previous year.

   (g) Comparison of figures of Inventories, Purchases and Sales with the corresponding budgeted figures, if available.

   (h) Comparison of significant ratios relating to inventories with similar ratios for other Firms in the same industry and with the industry norms, if available.

9. **Work-in-Process:**

   (a) The Auditor should examine the stage of completion of WIP to ascertain the appropriateness of its valuation.

   (b) If it is not possible to physically verify the stage of completion of WIP, the Auditor should examine whether the procedure followed by the entity for ascertaining the same is reliable.

   (c) The Auditor may - (i) examine the cost sheets and production records, (ii) hold discussions with the personnel concerned, and (iii) obtain expert opinion where necessary.

   (d) The Auditor may also examine subsequent records of Production/Sales.

(10) Management Representation: The Auditor should obtain from the management of the entity a written representation regarding the inventories held by the entity describing, the location of inventories, methods and procedures of physical verification, and basis of valuation.

(11) Documentation: The Auditor should maintain adequate working papers regarding Audit of Inventories, including - (a) Summary of each inventory and details regarding the extent of verification, and (b) Management Representation Letter concerning inventories.

(c) (i) Needs of Plantation Industry for a strong Internal Control System and consequent importance of integrated and well-organised Internal Audit System in Plantation Industry. Explain. [5]

Answer:

The basic nature of Plantation Industry and its unique features demand the existence of a strong internal control system in Plantation Industry due to the following reasons:

(i) As the field productivity of the raw materials vis-à-vis the quantum of output is highly dependent on the condition of the weather – common to any agro-based product, the input-output ratio cannot be fixed rigorously and at the same time, the total quantum of output of final product cannot also be forecast with substantial acuracy many a times;

(ii) The total operation of the Estate is controlled by a few managerial staff as compared to the vastness of the area of the estate and variety of operational functions involved;

(iii) Because of this vastness of the total area of any Estate being looked after by a small number of managerial staff usually, it becomes very difficult to exercise personal managerial supervision in all cases;

(iv) Sometimes , It becomes difficult to exercise the managerial supervision on the workers, to the fullest extent considering the low ratio of managerial staff and the number of workers and the Estate Management has to depend on the supervisory staff for most of the operations.

In view of the above factors, any plantation industry requires a strong well-structured internal control system to achieve the economic viability of the Industry as well as its smooth operation. Consequently, the existence of an integrated and well-organised Internal Audit System is very important in Plantation Industry because a structured Internal Audit system will continuously assess the existence and effectiveness of the internal control system in all the operational areas. Internal Audit will point out any gap found in the Internal Control system in all the operational areas and will also facilitate the continuous improvement in the Internal Control System and procedures.

(ii) Explain the different types of Operational Auditors. [5]

Answer:

There are three broad categories of Operational Auditors - (1) For Specific Functions, (2) For an Organisation, and (3) For Special Assignments.

1. **For Specific Functions:**
   (a) **Meaning:** Functional Auditor verifies one or more functions/ activities in an organization, e.g. Production, Marketing, Dispatch, etc.
   (b) **Advantages:** Functional Audits permit specialization by Auditors. Internal Auditors

can take up different functions for audit, and can develop considerable expertise in an area, and they can more efficiently audit that area.

(c) **Disadvantage:** There are possibilities of failure to evaluate Interrelated Functions, e.g. the Production Engineering Function interacts with Manufacturing and other Functions.

2. **For the Organisation:** Operational Audit may deal with organizational units, e.g. a Department, Branch, or Subsidiary. It emphasizes how efficiently and effectively functions interact. The plan of Organization and the methods to coordinate activities are especially important in this type of audit.
3. **For Special Assignments:** In Operational Auditing, Special Assignments arise at the request of Management. Some examples are - (a) determining the cause of an ineffective IT system, (b) investigating the possibility of fraud in a division, and (c) making recommendations for reducing the cost of a manufactured product.

(3) Answer any two questions [10×2=20]

(a) (i) The management of Up and Down Ltd. is worried about their increasing labour turnover in the factory and before analyzing the causes and taking remedial steps, they want to have an idea of the profit foregone as a result of labour turnover in the last year.
Last year sales amounted to ₹83,03,300 and the P/V Ratio was 20%. The total number of actual hours worked by the direct labour force was 4.45 lakhs. As a result of the delays by the personnel department in filling vacancies due to labour turnover, 1,00,000 potentially productive hours were lost. The actual direct labour hours included 30,000 hours attributable to training new recruits, out of which half of the hours were unproductive.

An analysis of costs incurred consequent on labour turnover revealed the following:

Settlement cost due to leaving	**₹43,820**
Recruitment Costs	**₹26,740**
Selection Costs	**₹12,750**
Training Costs	**₹30,490**

Assuming that the potential lost as a consequence of labour turnover could have been sold at prevailing prices. Find out the profit foregone last year on account of labour turnover. [6]

Solution:

Statement of profit foregone due to Labour Turnover (₹)

Contribution foregone	3,86,200
Settlement cost due to leaving	43,820
Recruitment cost	26,740
Selection Costs	12,750
Training Costs	30,490

Total cost of labour turnover	5,00,000

Computation of productive hours (Hours)

Actual hours worked	4,45,000
Less: Unproductive hours (for training)	15,000
Productive hours worked	4,30,000

Sales per productive hours = ₹83,03,300/4,30,000 hrs.
= ₹19.31

Sales foregone due to potential productive hours lost = 1,00,000 hours x ₹19.31
= ₹19,31,000

Contribution foregone on sales lost = Sales foregone x P/V Ratio
= ₹19,31,000 x 20/100
= ₹3,86,200

(ii) From the following figures decide whether it is worthwhile to investigate the variance:

	₹
1. Cost of investigation of variance	**6,400**
2. Cost of correction of out-of-control process	**20,000**
3. Cost of allowing the process to remain out of control	**95,000**
4. Probability of being in control	**0.90**

[4]

Solution:

A. Expected Cost of investigation

(i) Cost of investigation of variance (This will have to be incurred, if this decesion is taken)	₹ 6,400
(ii) Total cost of correction of out control situation is ₹ 20,000, but only 10% of this will be incurred, because probability of control is 90%. Therefore, expected cost of correction. (10% of ₹ 20,000)	₹ 2,000
Total	₹8,400

B. Expected Cost of allowing the process to remain out of control

Total cost of allowing the process to remain out of control is ₹95,000. Probability of control is 90%.

∴ Expected cost of allowing the process to remain out of control- ₹95,000 x 10% = 9.500

∴ From above, it is clear that expected cost of investigation is less than expected cost of allowing the process to remain out of control. Therefore, advice to management will be to investigate the variance.

(b) Tarun Textiles Ltd. has been having low profits. A special task force appointed for reviewing performance and prospects has the following to report:

The company has 1,200 looms working 2 shifts per day. There are 25 sections of 48 looms each. Each section has 24 weavers and a jobber. Thus there are 1,250 direct labourers, other than indirect labourers and service hands. The working time is between 7 a.m. and 12 mid-night, comprising 2 shifts of 8 hours each, with half hour interval between shifts. The production is 18 lakh metres per month and the realization is ₹3 per metre. The average wage of the direct labourer is ₹800 per month and the fixed costs amount to ₹1,75,000 per month. The product cost is ₹2.25 per metre in addition to direct wages.

The following suggestions are to be considered:

(i) Labour productivity can be improved by changing the layout of the machines.
(ii) Given the space available, with the proposed change in layout, only 1,008 looms can be re-installed, with 48 looms in each section.
(iii) Technically, a section of 48 looms can be run with 12 weavers, a helper and a jobber. It will be necessary to increase the age of direct labour, for such sections, by ₹110 per head per month. There will be some drop in production per loom. The company is not for retrenchment of labour.
(iv) The company can run a third shift between 12 mid-night and 7 a.m., with a half hour interval. However, for the six and half hours' work, eight hours' wage will have to be paid.
(v) Only 18 lakh metres can be sold at the present price of ₹3 per metre. There is an export offer for ₹4.5 lakh metres at ₹2.70 per metre.
(vi) As an initial step, the company can switch to 3 shift working, with 12 sections having 25 direct labourers each and 9 sections having 14 direct labourers each. Progressive conversion to 14 hands per section, for all sections, can be planned, as direct labourers retire or voluntarily leave the job. The production with three shift working will be 22.5 lakh metres. Additions to fixed costs will amount to ₹50,000 per month.

Examine the implications of the proposals for the company's profits and give your advice.

[10]

Solution:

Statement of Profitability

Particulars	Present	Proposed
No. of Looms	1,200	1,008
No. of shifts	2	3
No. of sections	25	21*
No. of sections (with 25 hands in each section @ ₹800 p.m.)	25	12
No. of sections (with 14 hands in each section @ ₹910 per head p.m.)	-	9
Total number of direct labourers employed	1,250	1,278
Expected production (lakh metres p.m.)	18	22.5

(*1008/48)

Profit Statement (per month) (₹)

Particulars	Present	Proposed
Sales Revenue (a)	54,00,000	66,15,000

Costs:			
Production Cost (@ ₹2.25)		40,50,000	50,62,500
Direct Wages		10,00,000	10,63,980
Fixed Costs		1,75,000	2,25,000
Total Costs	(b)	52,25,000	63,51,480
Profit	(a) – (b)	1,75,000	2,63,520

With the proposed plan of action the profit of the company has increased by ₹88,520 (₹2,63,520 - ₹1,75,000). Hence, the proposal is recommended for implementation.

Working Notes:

1. No. of Sections = No. of Looms/Looms per section = 1000 looms/48 looms = 21 sections.
2. No. of labourers employed
   No. at present (25 persons x 25 sections x 2 shifts) = 1250 persons
   Proposed [(25 x 12 x 3) + (14 x 9 x 3)] = 1278 persons
3. Direct Wages (per month)
   Present (1,250 x ₹800) = ₹10,00,000
   Proposed [(900 x ₹800) + (378 x ₹910)] = ₹10,63,980
4. Sales revenue per month
   Present (18,00,000 x ₹3) = ₹54,00,000

   Proposed [(18,00,000 x ₹3) + (4,50,000 x ₹2.70)] = ₹66,15,000

(c)(i) X Ltd presented the following particulars on 31.3.2015.
You are asked to compute the Inventory Turnover Ratio of each material:

	Material X ₹	Material Y ₹
Stock (as on 1.4.2014)	**12,000**	**16,000**
Purchases	**60,000**	**1,00,000**
Stock (as on 31.3.2015)	**18,000**	**24,000**

[5]

Solution:

Computation of the Inventory Turnover Ratio

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods}}{\text{Average Stock}}$$

	Material X ₹	Material Y ₹
(a) Cost of Goods Sold		
Opening Stock	12,000	16,000
Add: Purchases	60,000	1,00,000
	72,000	1,16,000
Less: Closing Stock	18,000	24,000

Cost of Goods Sold	54,000	92,000
(b) Average Stock		
Opening Stock	12,000	16,000
Add: Closing Stock	18,000	24,000
	30,000	40,000
∴ Average Stock	$\frac{30,000}{2}$	$\frac{40,000}{2}$
	= 15,000	= 20,000
∴ Inventory Turnover Ratio = $\frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$ =	$\frac{54,000}{15,000}$	$\frac{92,000}{20,000}$
	= 3.6 times	= 4.6 times

(ii) Manufacture's specification capacity for a machine per hour = 1500 units
No. of shifts (each shift of 8 hours each) = 3 shifts
Paid holidays in a year (365 days):
Sundays 52 days
Other holidays 8
Annual maintenance is done during the 8 other holidays.
Preventive weekly maintenance is carried on during Sundays.
Normal idle capacity due to lunch time, shift change etc =1hour.
Production during last five years = 76.20, 88, 65.82, 78.5, 76.6 lakhs units
Actual production during the year = 76.40 lakhs units.
Calculate Installed capacity, Available capacity, Actual capacity, Idle capacity and Abnormal idle capacity as per CAS 2 from the data given. [5]

Solution:

Installed capacity for the machine = 365 x 8 x 3 x 1500
= 131.40 lakhs units

Available capacity = (365 – 52 - 8) x (8 -1) x 3 x 1500
= 305 x 7 x 3 x 1500
= 96.08 lakhs units

Normal capacity = (76.2 + 78.5 + 76.6)/3
= 77.1 lakhs units.

Actual capacity utilization = 76.4 lakhs units
= 76.4/131.4 x 100
= 58.14%

Idle capacity = (131.40 - 76.4) lakhs units
= 55 lakhs units
= 55 /131.4 x 100
= 41.86%

Abnormal idle capacity = (77.1 - 76.4) lakhs units
= 0.70 lakhs units